

## Peer Review File

Article information: <http://dx.doi.org/10.21037/mhealth-20-64>

### **Reviewer #1**

**Comment 1:** In the first paragraph “HIV preventions interventions” should be “HIV prevention interventions”

**Reply 1:** We have made this correction.

**Comment 2:** Several terms are used that would be worth defining more clearly (such as “organic reach”, and “banner ads” – how are these different than other types of ads that can be purchased).

**Reply 2:** We have revised the text to add a definition of “banner ad” after the first time it is used in the introduction. There is already a definition of “organic reach” in the same paragraph.

**Comment 3:** Page 8 of the metrics states that the datasets of the eligible contacts and the enrolled participants could not be linked. Additional description of why they could not be linked would be helpful as it seems like an important metric for determining efficiency of the campaigns.

**Reply 3:** We have added a footnote to the Methods section that explains further why this linkage was not possible within our study data structure.

**Comment 4:** Sometimes the term “cost per eligible contact” and “cost per contact” is used. I would suggest using one term (cost per contact is used in the methods).

**Reply 4:** We have revised so that “cost per eligible contact” is used consistently throughout.

**Comment 5:** Would add at least one cost-per-click value for the results, since the discussion provides examples of cost pre click reported in the literature.

**Reply 5:** We thank the reviewer for this suggestion. We have added CPC values to the first paragraph of the Results section.

**Comment 6:** The last paragraph states that the number recruited through online strategies, but it would be important to provide context for the relative budgets for online vs in-person/venue-based recruitment.

**Reply 6:** Under the iTech Network grant budget, study sites receiving funding to conduct recruitment activities for a number of studies concurrently, including some not described in the present manuscript. These expenditures are not tracked at an individual study level. Therefore, it

is not possible for us to report on relative budgets for in-person or other recruitment events in a way that would be comparable to what was reported on for online recruitment.

**Comment 7:** It would be helpful to provide a proposed explanation of why the in-person recruitment was more efficient in P3 compared with online strategies. Clinic based recruitment may be more efficient for recruitment of those on PrEP or HIV treatment.

**Reply 7:** We have expanded upon our proposed explanation for greater efficiency of clinic-based recruitment.

**Comment 8:** I'm not sure that examples of all the advertisement images are needed – perhaps just include 1 or two from campaigns.

**Reply 8:** We thank the reviewer for this suggestion. We have included examples to represent each study and platform discussed in the paper, and believe it is instructive to the reader to keep these in the paper. However, if the editor deems it appropriate, we are happy to reduce the number of images in this figure.

## **Reviewer #2**

**Comment 1:** I have little by way of criticism or edits other than encouraging the authors to perhaps say more whether different venues for recruitment resulted in different ‘types’ of participants. For example, was one venue better for identifying men of color, younger men, participants somehow at greater risk for HIV. This information would be very helpful for your target audience. The authors do report if venues resulted in higher eligibility (which is one metric), but perhaps more could be said.

**Reply 1:** We were pleased to read that the reviewer was favorably disposed towards our manuscript and we thank the reviewer for the suggestion to include more detailed information about participant characteristics recruited through different venues. We have updated tables 2 and 4 to include the proportions of eligible contacts who identified as race or ethnicity other than non-Hispanic white and proportions of those under the age of 18. The Results and Discussion sections have also been expanded accordingly.